K061434 1012

AUG 2 2 2006

**stryker Howmedica**OSTEONICS

325 Corporate Drive Mahwah, NJ USA 07430

# 510(k) Summary of Safety and Effectiveness for the Trident® Hip System

Proprietary Name:

Trident® Hip System

Common Name:

Hip Prosthesis

Classification Name and Reference

Hip Joint, Metal/Ceramic/Polymer, Semi-

Constrained, Cemented or Nonporous Uncemented

Prosthesis

21 CFR §888.3350

Hip joint metal/polymer/metal semi-constrained

porous-coated uncemented prosthesis

21 CFR §888.3358

Hip joint metal/ceramic/polymer semi-constrained cemented or nonporous uncemented prosthesis

21 CFR §888.3353

Regulatory Class:

Class II

Device Product Code:

87 LZO - Prosthesis, Hip, Semi-Constrained,

Metal/Ceramic/Polymer, Cemented or Non-Porous,

Uncemented

87 LPH - Prosthesis Hip, Semi-Constrained, Porous

Coated, Uncemented

87 MEH - Prosthesis, hip, semi-constrained,

uncemented, metal/polymer, non-porous, calicum-

phosphate

87 JDI - Prosthesis, hip, semi-constrained,

metal/polymer, cemented

K061434 2012

For Information contact:

Tiffani Rogers

Regulatory Affairs Specialist

Stryker Orthopaedics 325 Corporate Drive

Mahwah, New Jersey 07432 Phone: (201) 831-5412

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Date Summary Prepared:

May 22, 2006

## **Device Description**

The LFIT Cobalt Chrome femoral head product line will now be available with large diameter femoral heads and acetabular components that accommodate the larger diameters. The LFIT femoral heads will be offered in 36mm, 40mm, and 44mm diameters. The larger diameter femoral heads are compatible with Howmedica Osteonics V-40® and C-taper® hip stems.

The Trident® acetabular system will offer polyethylene liners able to accommodate 40mm and 44mm diameter femoral heads. The polyethylene liners are compatible with the Trident® line of acetabular shells.

#### Intended Use:

The subject devices are sterile, single use devices. They are intended for mechanical fixation to their mating hip stems, and can be used in cemented or cementless hip arthroplasty procedures. They can be used with all Howmedica Osteonics C-Taper® and V-40® hip stems made from Titanium or CoCr alloys. When used as a total hip replacement, they are intended for use only with Howmedica Osteonics polyethylene inserts.

#### Indications for Use

- Painful disabling joint disease of the hip resulting from: degenerative arthritis, rheumatoid arthritis, post-traumatic arthritis or late stage avascular necrosis,
- Revision of previous unsuccessful femoral head replacement, cup arthroplasty or other procedure,
- Clinical management problems where arthrodesis or alternative reconstructive techniques are less likely to achieve satisfactory results,
- Where bone stock is of poor quality or is inadequate for other reconstructive techniques as indicated by deficiencies in the acetabulum.

### Substantial Equivalence:

The LFIT femoral heads and Trident® large diameter acetabular inserts are substantially equivalent to Howmedica Osteonics' LFIT cobalt chrome femoral heads, K021310 and K022077, Inter-Op Durasul Acetabular System cleared by Sulzer Orthopaedics, K993259, and Howmedica Osteonics' Trident® acetabular system, K033716.





Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

AUG 2 2 2006

Howmedica Osteonics Corp % Ms.Tiffani Rogers Regulatory Affairs Specialist 325 Corporate Drive Mahwah, New Jersey 07430

Re: K061434

Trade/Device Name: Trident™ Large Diameter Hip System

Regulation Number: 21 CFR 888.3358

Regulation Name: Hip joint metal/polymer/metal semi-constrained porous-coated

uncemented prosthesis

Regulatory Class: Class II

Product Code: LPH, LZO, JDI, MEH

Dated: May 22, 2006 Received: May 24, 2006

### Dear Ms. Rogers:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

## Page 2 - Ms. Tiffani Rogers

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Mark N. Melkerson

Director

Division of General, Restorative and Neurological Devices Office of Device Evaluation Center for Devices and

Radiological Health

Enclosure

510(k) Number (if known):
Device Name:Trident® Large Diameter Hip System
Indications for Use
Painful disabling joint disease of the hip resulting from: degenerative arthritis, rheumatoid arthritis, post-traumatic arthritis or late stage avascular necrosis,  Revision of previous unsuccessful femoral head replacement, cup arthroplasty or other procedure,  Clinical management problems where arthrodesis or alternative reconstructive techniques are less likely to achieve satisfactory results,  Where bone stock is of poor quality or is inadequate for other reconstructive techniques as indicated by deficiencies in the acetabulum.
Prescription Use X OR Over-the-Counter Use (Per 21 CFR 801.109)
(PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER PAGE IF NEEDED)  Concurrence of CDRH, Office of Device Evaluation (ODE)
(Division Sign-Off) Division of General, Restorative, and Neurological Devices  510(k) Number LOG1434